

WHAT IS CLAIMED IS:

1. A method for recognizing and flagging a data item used by one or more application programs as falling within the scope of a rule but anomalous when compared with other data items falling within the scope of the rule, the method comprising:

5                   determining a collection to which the data item belongs as defined by the rule;  
                  calculating statistics for the other data items in the collection;  
                  identifying whether the data item is an anomalous data item based on the  
statistical calculations; and

10                   flagging the data item as an anomalous data item if the data item is identified as  
an anomalous data item.

2. The method of claim 1 wherein calculating comprises calculating a mean data item size and standard deviation for the other data items in the collection.

3. The method of claim 1 wherein calculating comprises calculating a mean interval between data items and standard deviation for the other data items in the collection.

15                   4. The method of claim 1 wherein calculating comprises calculating a mean data item arrival time and standard deviation for the other data items in the collection.

5. The method of claim 1 wherein calculating comprises:  
                  calculating a presence or absence of keywords for the other data items in the  
collection; and

20                   identifying whether the data item is an anomalous data item based on the presence  
or absence of keywords.

6. The method of claim 1 wherein calculating statistics for the other data items in  
the collection is performed in real time.

7. The method of claim 1 wherein the step of calculating statistics for the other data items in the collection is performed periodically.

8. The method of claim 1 wherein identifying comprises determining whether the data item falls outside a number of standard deviations from the statistical calculations.

5 9. The method of claim 8 comprising setting the number of standard deviations to a value set by a user.

10. Computer readable media comprising program code, the program code instructing a programmable computer to execute a method for recognizing and flagging a data item used by one or more application programs as falling within the scope of a rule but anomalous when compared with other data items falling within the scope of the rule, the method comprising:

determining a collection to which the data item belongs as defined the rule;

calculating statistics for the other data items in the collection;

identifying whether the data item is an anomalous data item based on the

15 statistical calculations; and

flagging the data item as an anomalous data item if the data item is identified as an anomalous data item.

11. The computer readable media of claim 10 comprising a method for recognizing and flagging a data item used by one or more application programs as falling within the scope of a rule but anomalous when compared with other data items falling within the scope 20 of the rule wherein calculating comprises calculating a mean data item size and standard deviation for the other data item in the collection.

12. The computer readable media of claim 10 comprising a method for  
recognizing and flagging a data item used by one or more application programs as falling within  
the scope of a rule but anomalous when compared with other data items falling within the scope  
of the rule wherein calculating comprises calculating a mean interval between data items and  
5 standard deviation for the other data items in the collection.

13. The computer readable media of claim 10 comprising a method for  
recognizing and flagging a data item used by one or more application programs as falling within  
the scope of a rule but anomalous when compared with other data items falling within the scope  
of the rule wherein calculating comprises calculating a mean data item arrival time and standard  
10 deviation for the other data items in the collection.

14. The computer readable media of claim 10 comprising a method for  
recognizing and flagging a data item used by one or more application programs as falling within  
the scope of a rule but anomalous when compared with other data items falling within the scope  
of the rule wherein calculating comprises:  
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calculating a presence or absence of keywords for other data items in the  
collection; and

identifying whether the data item is an anomalous data item based on the presence  
or absence of keywords.

15. The computer readable media of claim 10 comprising a method for  
recognizing and flagging a data item used by one or more application programs as falling within  
20 the scope of a rule but anomalous when compared with other data items falling within the scope  
of the rule wherein calculating statistics for other data items in the collection is performed in real  
time.

16. The computer readable media of claim 10 comprising a method for  
recognizing and flagging a data item used by one or more application programs as falling within  
the scope of a rule but anomalous when compared with other data items falling within the scope  
of the rule wherein calculating statistics for other data items in the collection is performed  
5 periodically.

17. The computer readable media of claim 10 comprising a method for  
recognizing and flagging a data item used by one or more application programs as falling within  
the scope of a rule but anomalous when compared with other data items falling within the scope  
of the rule wherein identifying comprises determining whether the data item falls outside a  
number of standard deviations from the statistical calculations.

18. The computer readable media of claim 17 comprising a method for  
recognizing and flagging a data item used by one or more application programs as falling within  
the scope of a rule but anomalous when compared with other data items falling within the scope  
of the rule comprising setting the number of standard deviations to a value set by a user.